



Launch Mission Execution Forecast

Mission: Falcon 9 CRS-22

Issued: 1 June 2021 / 0900L (1300Z)

Valid: 3 June 2021 / 1324 – 1334L (1724 – 1734Z)



Forecast Discussion: An upper level trough currently located over the Bahamas is expected to slowly fill over the next couple of days, while an Atlantic surface ridge builds westward into the state. The combination of these developments will result in progressively deeper southeasterly flow, favoring late night and morning showers at the coast but focusing afternoon thunderstorms along a rapidly westward moving seabreeze to the west of the Spaceport. Remnant clouds and showers over the ocean and along the coast during the late morning may attempt to persist later, thus the main weather concerns for both Launch Day and Delay Day are the Cumulus Cloud Rule and Flight Through Precipitation.

Launch Day	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Cumulus Cloud Rule, Flight Through Precipitation				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Isol showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
	Temp/Humidity: 84°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
24-Hour Delay	Liftoff Winds (200'): 140° 15 - 20 mph	Cumulus	Scattered	3,000	12,000	Solar Activity: Low
	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Cumulus Cloud Rule, Flight Through Precipitation				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Isol showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
	Temp/Humidity: 84°F / 68%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
	Liftoff Winds (200'): 150° 15 - 20 mph	Cumulus	Scattered	3,000	12,000	Solar Activity: Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.						
Next Forecast Will Be Issued		2 JUN 2021				